AMENDMENTS TO THE SPECIFICATION:

Please amend the specification by replacing paragraph [0005] with the following paragraph as follows:

As schematically shown in Fig. 1, when an artificial bone 1 of the present invention is implanted into a living tissue 2, body fluid and ~~cell~~ cells (hereinafter referred to as "body fluid etc.") pass through a pore 3, ~~as an arrow~~ shown by arrows, to permeate into ~~an~~ the artificial bone 1. Body fluid etc. are captured by a hole 4 while passing through the pore 3. Any of the above-mentioned amorphous titanium oxide phase, amorphous alkali titanate phase, anatase phase and rutile phase aligned with (101) plane has apaptite-forming ability in a living body. Accordingly, the body fluid etc. captured by the hole 4 react with a film 5 ~~(not shown in Fig.)~~ formed in the hole 4 or in the periphery of the hole 4 to form ~~a~~ bone on the film. The artificial bone 1 remarkably differs in this respect from a conventional artificial bone comprising titanium or the like, which forms a bond only in a contacting portion with an living bone to bond therewith. That is to say, a conventional artificial bone has formed a new bone only in a contacting portion (for example, a portion A) between the artificial bone and a living tissue 2 in the case where the above-mentioned living tissue 2 is a living bone and ~~a~~ the location for ~~implanted~~ implantation is a bone defect. On the contrary, the artificial bone 1 of the present invention forms a new bone in a location away from a living tissue 2, such as in the hole 4 or in the periphery thereof.